

**ABSTRACT**

[0023] The present invention relates to a method of creating a design for a semiconductor memory. In an embodiment, a memory compiler for a semiconductor memory has access to a set of leaf cell designs for use by the memory compiler, the leaf cell designs comprising a power management circuit design as a leaf cell for a memory circuit. A user may elect to allow enablement of an ultra low power feature and the memory compiler creates a design which incorporates the power management circuit in a compiled semiconductor memory macro when the user-selectable option is enabled. It is emphasized that this abstract is provided to comply with the rules requiring an abstract which will allow a searcher or other reader to quickly ascertain the subject matter of the technical disclosure. It is submitted with the understanding that it will not be used to interpret or limit the scope or meaning of the claims.